

devices with the capacity to access a data network 104 including, but not limited to, personal computers, wireless computing devices, and personal digital assistants. The data network 104 used to facilitate communication between the hardware and software components of the invention may be any type of network capable of carrying data, such as the Internet, Intranets, LANs, WANs, fixed wireless networks, etc. Furthermore, the data network may be comprised of a plurality of disparate networks and network types.

Payor 102 and payee 106 devices communicate with a P2P server 108 via the network 104. Using the P2P system under the control of the P2P server 108, a variety of services can be offered, for example, the buying and selling of any number of goods and services. In addition to facilitating these transactions, the P2P server 108 is operative to control the transfer of funds in satisfaction of these transactions. Using the payor device 102, the payor initiates a payment transaction with the payee device 106 via the P2P server 108. The payor provides the financial parameters of the transaction, e.g., the financial instrument used in satisfaction of the transaction, the amount of the transaction, validation information uniquely and securely identifying the payor, etc. The P2P server can utilize any number of financial instruments, including, but not limited to, credit and debit cards, checking and savings accounts, money market accounts, smart cards, and stored value cards.

The financial parameters of the transaction are transmitted by the payor device 102 in the native data format of the P2P server 108. Upon receipt, the financial parameters are parsed and the payor's financial institution 110 validates the transaction. According to one embodiment, the financial institution uses a network that is distinct from the network carrying communications between the payor device 102 and the P2P server 108, although the payor financial institution 110 could also communicate with the P2P server 108 over a common

network. Notification regarding the approval or denial of the transaction is returned to the P2P server 108, which generates payment request that is transmitted to a cash payment server 118.

The payment request is received by the cash payment server 118 in the native data format of the P2P sever 108. The cash payment server 118 transforms the received payment request into a payment request that is properly formatted for action by an ATM control sever 114 and transmitted across an ATM network 104a. The ATM control sever 114 is operative to control one or more remotely located ATM terminals 112. According to one embodiment of the invention, the ATM network requires communications formatted according to the Z-Cash standard. The ATM control server 114 also generates a PIN code to access the payment and payment instructions for the ATM.

The payment instructions are transmitted to an ATM 112 specified by the payor 102 and notification returned stating that the transfer was successful. The ATM control server 114 generates a response or receipt indicating that 1) the payment instructions have been successfully transmitted to and received by the ATM 112, and 2) the PIN code associated with the transaction. Alternatively, additional information can be included in the response, for example, the payor name, a receiving institution identifier, the transaction amount, any transaction fees levied by either the P2P server 108 or the ATM control server 114, the transaction type, and any other transaction related information.

The response, in the native data format of the ATM control server 114, is transmitted across the network 104a, received by the cash payment server 118 and translated into the native data format of the P2P server 108. The translated receipt is received and parsed by the P2P server 108. Information in the receipt relevant to the payee, e.g., PIN code, ATM location, and amount of payment, are transmitted from the P2P server, via the network 104, to the payee

device 106. Information in the receipt relevant to the payor is transmitted to the payor device 102. The payee uses the information contained in the receipt to interface with the designated ATM 112 to retrieve the cash payment. Alternatively, the PIN code is transmitted to the payor, who communicates it to the payee according to methods well known to those skilled in the art, e.g., telephone or e-mail.

Fig. 2 is a block diagram presenting a detailed view of the hardware and software components previously presented. The P2P server 108 stores and executes P2P server software 206. The P2P server software 206 is used to bring parties together, e.g., a payor and payee utilizing a payor device 102 and payee device 106, to conduct transactions. For example, the P2P server software 206 may facilitate matching buyers and sellers of antique goods. Alternatively, the P2P system is configured to only handle payment transactions in conjunction with a sale or auction system. Indeed, the P2P server software 206 is capable of being configured to facilitate the buying and selling of virtually any type of good or service. The P2P server software 206 is further operative to handle the transfer of funds in satisfaction of the sale of a good or service. The software 206 debits a financial instrument specified by the payor and transfers the funds to the payee. The transfer of funds effected by the software 206 includes, but is not limited to, debiting a smart card, stored value card, checking account, savings account, or cash payment.

In the P2P system 200, a buyer or payor utilizes a P2P client module 202 executing on the payor device 102 to interface with the P2P server software 206 executing on the P2P server 108. In this manner, the payor, through use of the payor device 102 and P2P client module 202, is capable of finding other parties selling desired goods and services. A seller or payee also utilizes a P2P client module 202 executing on the payee device 106 to interface with